Educational

Buy-American Requirements

US MANUFACTURING OF THE NORTHERN POWER 100

The team at Northern Power Systems has been delivering innovative wind energy solutions made in the USA for over 34 years. Our partnerships with the Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL) have helped lay the foundation for Northern Power's advanced wind turbine technology. Our installed base of turbines has logged millions of kilowatt-hours of production to date, demonstrating our commitment to performance and reliability.

DESIGNED AND BUILT IN AMERICA

The NPS 100 wind turbine is a 100kW machine that was developed and designed in the USA. It has been extensively field tested at NREL's National Wind Test Center in Colorado and is assembled in Barre, Vermont. There is no other 100kW wind turbine manufacturer in the USA that features permanent magnet, direct drive technology. Northern Power is the sole provider of Northern Power 100 wind turbines to our valued partners and the sole manufacturer of Northern Power 100 technology.

NORTHERN POWER 100 WIND TURBINE MEETS ARRA BUY-AMERICAN REQUIREMENTS

Northern Power monitors the developing regulatory framework for implementation of and compliance with the American Recovery and Reinvestment Act of 2009 (ARRA). To verify compliance with the Buy-American requirement under ARRA, Northern Power has reviewed the requirements for US manufacturing pursuant to ARRA and subsequent guidelines and clarifications published by governmental agencies. In that connection, Northern Power has completed the attached compliance checklist. Based on interim guidance provided by the White House Office of Management and Budget, and after due inquiry, Northern Power can state that the Northern Power 100 wind turbine is in compliance with the Buy-American requirement of ARRA and is eligible for such funding when included as part of a public work consistent with ARRA and when the ARRA grantee develops a public work in accordance with ARRA guidelines.

Northern
POWER SYSTEMS

Buy-American Compliance Checklist

Project:		
Contractor:		Date:
Sup/Mfg:	Northern Power Systems	
Product Description:	Northern Power® 100 wind turbine	

Buy America Criteria	YES	NO
1. Were all of the components of the manufactured good manufactured in the United States, and were all of the components assembled into the final product in the U.S.? (If the answer is yes, then this is clearly manufactured in the U.S., and the inquiry is complete)	☐	☒
2. Was there a change in character or use of the good or the components in America? (These questions are asked about the finished good as a whole, not about each individual component) Check "YES" if the answer is yes to any of the following, (2a, 2b, 2c).	☒	☐
a. Was there a change in the physical and/or chemical properties or characteristics designed to alter the functionality of the good?	☐	☒
b. Did the manufacturing or processing operation result in a change of a product(s) with one use into a product with a different use?	☒	☐
c. Did the manufacturing or processing operation result in the narrowing of the range of possible uses of a multi-use product?	☒	☐
3. Was(/were) the process(es) performed in the U.S. (including but not limited to assembly) complex and meaningful? Check "YES" if the answer is yes to any of the following, (3a, 3b, 3c, 3d, 3e).	☒	☐
a. Did the process(es) take a substantial amount of time?	☒	☐
b. Was(/were) the process(es) costly?	☒	☐
c. Did the process(es) require particular high level skills?	☒	☐
d. Did the process(es) require a number of different operations?	☒	☐
e. Was substantial value added in the process(es)?	☒	☐

Please provide a brief explanation of any "YES" answers listed above, include any additional support documentation if available.

2. Product requires all of the individual components, which are assembled in Barre, Vermont or at the project site, in order to function as a product. Individual components have no other use unless assembled as a product. The combined product has a sole purpose and use as a wind energy generator.
3. The manufacture and assembly process is complex and lengthy, requiring a high level of specialized technical and engineering skills to be performed in Barre, Vermont and at the project site. At the project site:
- the hub and blades are assembled into a rotor, requiring careful adjustment by factory-trained technicians
- the tower sections and nacelle are erected using specialized rigging and hoisting equipment and requiring experienced hoisting personnel
- the commissioning of the wind turbine involves sophisticated validation and adjustment of operating parameters by factory-trained technicians to safely start the unit up and tune it for best performance..

	Jim Stover, Vice President, Product Management and Engineering
Signature	Print Name